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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/24/2008 have been fully considered but they are not persuasive.
2. In view of Applicant's amendments the 112 rejection of **claims 6 and 10** has been withdrawn.
3. With respect to **claim 1** Applicant argues "Sasaki does not disclose or suggest a moving device comprising a single drive motor configured to reciprocatingly move the driving barrel to perform both focus and zoom operations".
4. The Examiner respectfully disagrees with Applicant's argument. As can be seen in Fig. 4 of Sasaki the moving device of Sasaki comprises a single motor Mz which when operated would move both the zoom lens L1 and the focusing lens L2, thus the moving device does comprise a single motor (Mz) configured to reciprocatingly move the driving barrel to perform both a focus and zoom operation.
5. **Claims 2-12** are not allowable for at least the reason they depend from **claim 1** which is not allowable for the reasons discussed above.
6. With respect to **claim 20** Applicant argues neither Ohkawara nor Bates disclose the added limitation of using a single drive motor to perform both a focus and zoom operation.
7. The Examiner agrees that neither Ohkawara nor Bates disclose use of a single motor for both focusing and zooming, however such a concept is well known and expected in the art at the time of Applicant's invention. The rejection of **claim 20** has

been updated below in view of Applicant's amendment to take Official Notice to the concept and advantage of using a single drive motor to perform both a focus and zoom operation in a camera.

8. **Claims 21-25** are not allowable for at least the reason they depend from **claim 20** which is not allowable for the reasons discussed above.

9. Also, the Applicant did not traverse the Official Notice taken in the rejection of claim 3, thus the concepts and advantages of using a step motor in a lens barrel to adjust the lenses are well known and expected in the art are considered admitted prior art by the Applicant. See MPEP 2144.03.

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. **Claims 1-2, 4-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,267,085 to Sasaki et al.**

12. As stated in the MPEP § 2111.02 (please see also *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 – CCPA 1951), if the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim; then the preamble of the claim is not served to further define the structure of the claim. Thus, in regards to claims 1-11, the preamble of the claim is not given any patentable weight since the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim.

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13. With respect to **claim 1 Sasaki** discloses, in Fig. 4, an iris recognition camera, comprising: a driving barrel (Fig. 4) configured to support a lens (L1 or L2); a moving device comprising a single drive motor (Mz) configured to reciprocatingly move the driving barrel to perform both focus and zoom operations (column 5 lines 18-25, lines 32-34 and lines 59-61 and column 6 lines 1-3); and a position sensor (22) configured to detect a position of the driving barrel (Fig. 4) within the camera (column 6 lines 29-46; where the magnetic resistance element detects the position of the driving barrel by detecting the position of the first holding frame 10 on the optical axis).

14. With respect to **claim 2 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, wherein the moving device comprises: the single drive motor (Mz); a lead screw (2) connected to the motor (Mz) at one end; and a rack (11) coupled to an outer circumference of the lead screw (2).

15. With respect to **claim 4 Sasaki** discloses, in Fig. 4, The iris recognition camera according to claim 1, wherein the driving barrel is provided at one side with a detecting portion (21) configured to communicate with the position sensor (22) so that the position sensor (22) detects a position of the driving barrel (column 6 lines 31-46).

16. With respect to **claim 5 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, wherein the lens comprises a wide-angle lens (column 8 lines 5-11; where the lens system focuses in the telescopic side and wide angle side, thus the lenses are wide angles lenses).

17. With respect to **claim 7 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, further comprising one or more guide bars (2, 6 and 12) configured

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to guide the driving barrel during reciprocating movement (column 5 line 23 through column 6 line 30; where the anti rotation bar 6 and lead screws 2 and 12 guide the lenses during reciprocating movement of the driving barrel).

18. With respect to **claim 8 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 7, wherein the one or more guide bars (2, 6 and 12) comprises a pair of guide bars (2 and 6), respectively, positioned on opposite sides of the driving barrel (fig. 4).

19. With respect to **claim 9 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, wherein the position sensor (22) is positioned behind the lens (Fig. 4; where the sensor 22 can be seen as positioned behind both lens L1 and L2 with respect from the top of body tube 1).

Claim Rejections - 35 USC § 103

20. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

21. **Claim 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al.**

22. With respect to **claim 3 Sasaki** discloses an iris recognition camera, comprising: a driving barrel configured to support a lens; a moving device configured to reciprocatingly move the driving barrel to perform both focus and zoom operations; and a position sensor configured to detect a position of the driving barrel within the camera;

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and wherein the moving device comprises: a motor; a lead screw connected to the motor at one end; and a rack coupled to an outer circumference of the lead screw.

23. **Sasaki** does not expressly disclose wherein the motor comprises a step motor.

24. However, Official Notice (MPEP § 2144.03) is taken that both the concepts and advantages of using a step motor in a lens barrel to adjust the lenses are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have a step motor as the motors Mz and Mf of **Sasaki** as one of ordinary skill in the lens barrel art would instantly recognize a simple means to accurately control the lens positions through use of a common controller.

25. With respect to **claim 6 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 5, wherein the wide-angle lens has a focusing distance of 40 mm (column 4 line 60 through column 5 line 2).

26. **Sasaki** does not expressly disclose the focusing distance is 11.8.+/-1 mm.

27. However, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the focusing distance is 11.8.+/-1 mm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

28. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al in view of U.S. Patent 6,850,631 to Oda et al.**

29. With respect to **claim 10 Sasaki** does not expressly disclose wherein the lens has an image pickup distance range of 20-70cm. However, Oda teaches an iris input

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device in which the focal length of the lens is fixed at a value within approximately 0.5 to 50 cm (Oda, col. 4 lines .28-29).

30. Therefore, taking the teachings of Sasaki and Oda, it would have been obvious to one of ordinary skill in the art to have a lens with a pickup distance range of about 20-70 cm in order to get a proper reading of the iris, anything less than 20 cm may cause an inaccurate reading, or cause the eye to come into contact with the iris recognition camera (Oda, col. 4 lines 28-46) and “[i]n the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990)” MPEP 2144.05.

31. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al in view of U.S. Patent Application Publication 2002/0135693 A1 to Ohkawara et al.

32. With respect to **claim 11 Sasaki** does not expressly disclose wherein the position sensor comprises one of an optical sensor and a contact sensor.

33. However, in analogous art, **Ohkawara** discloses, in Fig. 17-18, an optical sensor which is used to determine the position of a lens within a lens barrel (paragraphs 202-210). At the time the invention was made it would have been obvious to one of ordinary skill in the art to have used a optical sensor as taught by **Ohkawara** as the sensor for detecting the lenses disclosed by **Sasaki**, for doing so would provide a small and power efficient sensor, thus reducing the size and power consumption of the system.

34. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al in view of U.S. Patent 6,930,707 to Bates et al.

35. With respect to **claim 12 Sasaki** does not expressly disclose the lens barrel is used for an iris recognition camera in an iris recognition system.

36. In analogous art, **Bates** discloses, in Fig. 5, using a lens barrel for iris recognition (column 5 lines 32-52). As stated in **Bates** (column 10 lines 17-34) at the time the invention was made it would have been obvious to one of ordinary skill in the art to have used the lens barrel of **Sasaki** for iris recognition as taught by **Bates**, for doing so would provide anti-theft or privacy implementation without adding any cost to the camera.

37. Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0135693 A1 to Ohkawara et al in view of U.S. Patent 6,930,707 to Bates et al.

38. With respect to **claim 20 Ohkawara** discloses, in Fig. 17-18, discloses, in Fig. 17-18, a method of operation for a camera, comprising: detecting a user (paragraph 75 and 191; where it is detected is a wide-angle lens is mounted when the signal is sent to the AF microcontroller 115 from detecting switch 123; thus, a wide-angle lens user is detected when the wide angle lens is attached); moving a camera lens (101 and 104) to an initial position detected by a position sensor (115) after the position sensor (115) detects the user (paragraph 75, 191 and 194; where the AF controller 115 controls the lenses to return to their respective predetermined positions after the wide angle user is detected from attaching the wide angle lens); thereafter reciprocatingly moving the camera lens (101 and 104) to perform both focus and zoom operations from the initial

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position to an image pickup location where a object can be captured (paragraph 203-205); and performing the image pickup using an image pickup device (paragraph 70-71; where it is inherent to capturing video signals to perform image pickup after focusing).

39. **Ohkawara** does not expressly disclose the camera is used as an iris recognition camera and where a user's iris is captured.

40. In analogous art, **Bates** discloses, in Fig. 5, using a lens barrel for iris recognition camera which is used to capture a user's iris (column 5 lines 32-52). As stated in **Bates** (column 10 lines 17-34) at the time the invention was made it would have been obvious to one of ordinary skill in the art to have used the lens barrel of **Ohkawara** for iris recognition as taught by **Bates**, for doing so would provide anti-theft or privacy implementation without adding any cost to the camera.

41. Additionally, neither Ohkawara nor Bates disclose use of a single motor for both focusing and zooming.

42. However, Official Notice (MPEP § 2144.03) is taken that both the concepts and advantages of using a single drive motor to perform both a focus and zoom operation in a camera are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have used a single motor to perform both the focus and zoom operation as it would reduce the size of the lens unit, which allows for incorporation into more devices that require a small form factor.

43. **Examiner's note:** evidence of such a concept and advantage can be found in US Patent 6,011,657 to Labaziewicz which states in column 2 lines 25-38: "[i]t is an

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object of the present invention to provide a zoom mechanism that provides for zooming and focusing with a single motor while minimizing focusing lens travel”.

44. With respect to **claim 21 Ohkawara** discloses wherein the camera lens comprises a wide-angle lens (paragraph 75).

45. With respect to **claim 22 Ohkawara** discloses wherein the image pickup device comprises a charge-coupled device (paragraph 70-71).

46. With respect to **claim 23 Ohkawara** discloses wherein the driving motor comprises a step motor (paragraph 66 and 69).

47. With respect to **claim 24 Ohkawara** discloses wherein the iris recognition camera further comprises a power transmission configured to transmit power for moving the camera lens (paragraph 66 and 69; where the step motors transmit power to move the lenses).

48. **Claims 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0135693 A1 to Ohkawara et al in view of U.S. Patent 6,930,707 to Bates et al in further view of U.S. Patent 5,267,085 to Sasaki et al.**

49. With respect to **claim 25 Ohkawara in view of Bates** does not expressly disclose wherein the power transmission device includes a lead screw configured to be rotated by power from the drive motor, and rack screw coupled to an outer circumference of lead screw.

50. In analogous art, **Sasaki** discloses controlling lens position though a transmission device including a lead screw (2) configured to be rotated by power from a

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driving motor (Mz), and rack screw (12) coupled to an outer circumference of lead screw (2) (Fig. 4 and column 5 line 23 through column 6 line 30; where the lens L2 is controlled via screw 12 which is coupled to the outer circumference of screw 2 via first holding frame 10 as seen in Fig. 4). As stated in Sasaki (column 9 line 66 through column 10 line 2) at the time the invention was made it would have been obvious to one of ordinary skill in the art to have used a screw system as taught by **Sasaki** for moving the lenses of **Ohkawara in view of Bates**, for doing so would provide a zoom lens device of a two-lens grouped structure in which the zoom lens device is made compact and a zoom ratio is increases.

Conclusion

51. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL M. PASIEWICZ whose telephone number is (571)272-5516. The examiner can normally be reached on M-F 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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DMP

January 15, 2009

/Sinh N Tran/

Supervisory Patent Examiner, Art Unit 2622